

LEGEND

TRIASSIC

FUNDY GROUP (undivided)
TF Sandstone, siltstone, conglomerate

CARBONIFEROUS

C Undivided Carboniferous sedimentary rocks

CUMBERLAND GROUP

CC Sandstone and conglomerate; minor mudstone, calcrete, and coal seams

CT TYNEMOUTH CREEK FORMATION: conglomerate, sandstone, mudstone, limestone

CLB LANCASTER AND BALLS LAKE FORMATIONS (undivided): sandstone, shale, conglomerate

CH HOPEWELL GROUP
 Mudstone, sandstone, conglomerate

CW WINDSOR GROUP
 Limestone, gypsum, anhydrite, rock salt, conglomerate, sandstone, shale

CARBONIFEROUS OR OLDER

Cb Epidotized basalt; minor siltstone and limestone (includes part of former Mispec Group)

DEVONIAN - CARBONIFEROUS

HORTON GROUP
DCH Conglomerate, sandstone, mudstone, shale; minor limestone, dolostone, salt, and calcrete

DEVONIAN

DF FAIRFIELD FORMATION: Rhyolitic flow, lithic tuff, tuffaceous siltstone and sandstone

ORDOVICIAN

OG GRASSY LAKE FORMATION: Grey flow-banded rhyolite/dacite, sparsely porphyritic

CAMBRIAN

CCS CAPE SPENCER FORMATION: Sandstone, conglomerate

SAINT JOHN GROUP

CSJ Shale, siltstone, sandstone, conglomerate; minor quartz arenite and limestone

NEOPROTEROZOIC - SILURIAN(?)

ZSBT Undivided metamorphic and plutonic rocks of the Brookville terrane

NEOPROTEROZOIC - CAMBRIAN

ZCrb Micaceous siltstone and sandstone (mainly red, locally grey), red conglomerate; quartzite-pebble conglomerate, red tuffaceous siltstone; locally slate and quartzite

NEOPROTEROZOIC

COLDBROOK GROUP (ca. 560 - 550 Ma)
ZCbrs Amygdaloidal basalt flows; locally with interlayered rhyolite, red conglomerate, and sandstone

ZCbr Interlayered amygdaloidal basalt, basaltic tuff, rhyolite, rhyolitic to dacitic tuff

ZCb Amygdaloidal to massive basalt, with less abundant mafic tuff

ZCr Pink to red to grey, commonly flow-banded rhyolite and rhyolitic tuff (locally pyritic); minor laminated siltstone/chert

ZCbf Bloomington Mountain brown felsite

ZCba Green epidotized basaltic and andesitic rocks; locally includes plagioclase porphyry and green dacitic sheets

ZCrd Grey to reddish-grey banded rhyolite to dacite, rhyolitic lapilli tuff and minor crystal tuff; abundant pink rhyolite/felsite dykes(?) and mafic dykes (feeders to basalt flows in younger sequence?)

ZCit Mainly dacitic lapilli tuff and dark grey to black dacitic flows

ZCmt Mixed lapilli tuff/tuffaceous conglomerate, laminated siltstone, basalt lenses and layers (ZCmtb)

ZCls Laminated black to grey to green siliceous siltstone; minor tuffaceous conglomerate

ZCft Dark grey to black (locally red to pink) lapilli and crystal tuff of dacitic to rhyolitic composition, locally flow-banded; minor basaltic lenses and layers (Zcftb)

ZCit Volcanogenic lapilli tuff or tuffaceous conglomerate, typically with dacitic to rhyolitic subrounded to subangular clasts; colour varies from grey to black to pink to orange and rarely red; black dacitic lapilli and grey crystal tuff and laminated siltstone/chert occur locally

ZCgd Grey-green dacitic flows and crystal tuff; minor tuffaceous sandstone

BROAD RIVER GROUP (ca. 620 Ma)

ZBft Pink to red to buff felsic crystal tuff, locally flow-banded; well cleaved, minor red siltstone/tuff. Contains bodies of dacitic porphyry (ZBftdp)

ZBit Grey intermediate crystal tuff

ZBdr Dacitic and rhyolitic tuff

ZBat Andesitic to basaltic crystal tuff, minor basaltic flows; intermediate crystal and lithic tuff; volcanogenic epiclastic rocks

ZBct Crystal and lithic tuff, mainly of dacitic to rhyolitic composition; minor laminated siltstone, arkosic sandstone, and mafic tuff

ZBs Red, maroon, and grey slate, phyllite, arkosic metasiltstone and metasandstone, metaconglomerate, minor micaceous quartzite

ZBmt Mafic to intermediate crystal tuff, lithic tuff, basaltic flows, volcanogenic epiclastic rocks, locally chlorite schist and phyllite

ZBmf Mafic and felsic tuff, amygdaloidal basalt, minor rhyolite, abundant pyrite-rich felsic layers, sheets of quartz-rich granitoid rocks. In the northeast, includes phyllitic metasedimentary and metatuffaceous rocks; locally laminated

ZBts Dacitic to andesitic crystal-lithic tuff, laminated grey-green siliceous siltstone

ZBdt Dacitic crystal tuff and crystal-lithic tuff; abundant grey pyritic felsite and felsic tuff, minor flow-banded rhyolite. Includes mappable areas of amygdaloidal basalt (unit ZBdtb)

ZBas Siltstone, sandstone, pebble conglomerate (mainly arkosic)

ZBtp Tuffaceous phyllite, chloritic schist, slate, felsite, arkosic sandstone and conglomerate ('Teahan unit')

ZBlis Metasiltstone (hornfels), dacitic crystal and lithic crystal tuff, mafic tuff, minor chert/felsite ('Lumsden unit')

HAMMONDVALE METAMORPHIC SUITE

ZH Mica schist, albite porphyroblastic schist (locally garnet-bearing), minor marble

PLUTONIC UNITS

NEOPROTEROZOIC (OR YOUNGER)
 MINOR (unnamed) INTRUSIVE UNITS

Zpp Plagioclase porphyry

Zgd Granodiorite

Zgt Granite, syenite

Zdi Diorite

Zgb Gabbro, diorite

NEOPROTEROZOIC (ca. 560-550 Ma)
ZUM UPHAM MOUNTAIN PLUTON: syenogranite, minor diorite and gabbro

BONNELL BROOK PLUTON (ZBBd - ZBBr)
ZBBr Spherulitic rhyolite, fine-grained granite

ZBBfg Fine-grained granite

ZBBg Granite

ZBBd Diorite

ZBM BAXTERS MOUNTAIN PLUTON: diorite, gabbro, syenogranite

ZCM CALEDONIA MOUNTAIN PLUTON: gabbro, gabbro-norite

ZDC DEVINE CORNER GABBRO: gabbro

ZMS MECHANIC SETTLEMENT PLUTON: gabbro, gabbro-norite, olivine gabbro-norite, peridotite, troctolite, olivine pyroxenite, feldspathic peridotite, anorthosite, diorite

NEOPROTEROZOIC (ca. 620 Ma)
ZEC EMERSON CREEK PLUTON: sheared granite and granodiorite

ZML MILLICAN LAKE PLUTON: sheared granite and granodiorite

ZKH KENT HILLS PLUTON: granodiorite, granite

ZCB CALEDONIA BROOK GRANODIORITE: biotite-hornblende granodiorite

ZCR CALEDONIA ROAD GRANITOID SUITE: quartz diorite, granodiorite, granite

ZFF FORTYFIVE RIVER GRANODIORITE: granodiorite, granite

ZA ALMA PLUTON: quartz diorite, diorite, tonalite, granodiorite

ZRT RAT TAIL BROOK AND SIMILAR PLUTONS: tonalite, diorite, granodiorite

ZGC GOOSE CREEK LEUCOTONALITE: leucotonalite, diorite, tonalite

POINT WOLFE RIVER PLUTON

ZPWgp Granite porphyry

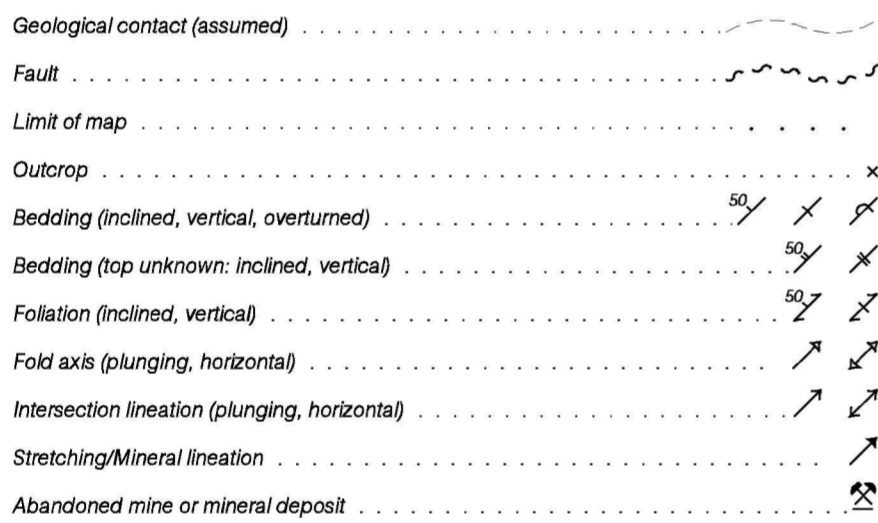
ZPWgt Blueberry Hill granite

ZPWgg Old Shepody Road granite/granodiorite

ZPWgd Pollett River granodiorite

ZPWqm Quartz monzodiorite/tonalite

ZPWqd Quartz diorite/tonalite



Geology by S.M. Barr and C.E. White, 1985-1991

For more explanation and description of the units on this map, refer to: Barr, S.M. and White, C.E. 1999: Field relations, petrology, and structure of Neoproterozoic rocks in the Caledonian Highlands, southern New Brunswick. Geological Survey of Canada Bulletin 530

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COOPERATION AGREEMENT ON MINERAL DEVELOPMENT / ENTENTE DE COOPÉRATION SUR L'EXPLOITATION MINÉRALE

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Contribution à l'Entente de coopération Canada-Nouveau-Brunswick sur l'exploitation minière (1990-1995), entente auxiliaire négociée en vertu de l'Entente Canada/Nouveau-Brunswick de développement économique et régional.

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